

IRIS-9, Göttingen, 25-29 June 2018

Contributed Talk

6. Science together with future facilities

Preview of First Results from Hi-C 2.1 and IRIS

S. Savage¹, A. Winebarger¹, L. Rachmeler¹, L. Golub², R. Walsh³, B. De Pontieu⁴, D. Brooks⁵, J. Cirtain⁶, K. Kobayashi¹, S. McIntosh⁷, D. McKenzie¹, R. Morton⁸, H. Peter⁹, P. Testa², S. Tiwari¹⁰,
H. Warren¹¹

¹*NASA Marshall Space Flight Center*

²*Harvard-Smithsonian Astrophysical Observatory*

³*University of Central Lancashire*

⁴*Lockheed Martin Solar and Astrophysics Laboratory*

⁵*George Mason University*

⁶*BWX Technologies*

⁷*High Altitude Observatory*

⁸*Northumbria University*

⁹*Max Planck Institute for Solar System Research*

¹⁰*Bay Area Environ Research Institute*

¹¹*Naval Research Laboratory*

The spatial and temporal resolutions of the available coronal observatories are inadequate to resolve the signatures of coronal heating. High-resolution and high-cadence observations available with the Interface Region Imaging Spectrograph (IRIS) and the High-resolution Coronal Imager (Hi-C) instrument hint that ~ 0.3 arcsec resolution images and < 10 s cadence provide the necessary resolution to detect heating events. Hi-C was originally launched from White Sands Missile Range on July 11, 2012 and obtained images of a solar active region in the 19.3 nm passband. It will be launched again as Hi-C 2.1 in May, 2018 with a 17.1 nm passband and acquire co-temporal and co-spatial observations with IRIS. These data are expected to provide a unique method of testing the energy flow between the chromosphere and corona. Here, we will present a preview of the performance from this latest flight of the Hi-C rocket in conjunction with the coordinated IRIS data set in anticipation of a full release of results and data products to the broader solar community in the coming months.